

REMARKS/ARGUMENTS

Applicant expresses his sincere appreciation for the identification of initially allowable subject matter in claims 2-3 and 6-17. Upon carefully reviewing claims 1, 4 and 6 and comparing these claims to the prior art applied by the Examiner, Applicant is of the opinion that the subject matter of the rejected claims is also allowable. In the following remarks Applicant sets forth his reasons as to why his claims are not obvious over the applied references.

Drawings:

In the objection to the drawings under 35 C.F.R. §1.83(a) the Examiner stated that "the display of signals while superimposed with respect to one another on a plot of only the end points is to be shown or the features cancelled from the claims." Applicant respectfully requests that this objection be withdrawn. The Examiner's attention is directed to page 5, lines 17-21 of Applicant's specification which states:

"Fig. 7a-7c are views showing the color coded frequency transforms resulting when the wave forms of Fig. 5 are superimposed upon one another in a low to high arrangement in Fig. 7a, a high to low arrangement in Fig. 7b, and in a transform illustrating only end points in Fig. 7c; the illustrated wave form displaying detection of an outside diameter pit."

Accordingly, it is respectfully submitted that the Applicant has covered the requirement showing the display of superimposed signals with reference to Fig. 7a, 7b and 7c. In

addition, Figs. 8, 9, 10, 12, 13 and 14 each have color coded signals superimposed with respect to one another in the Figure Sections a and b. Moreover, only a plot of the end points are illustrated in section c of these diagrams. For these reasons it is clear that Applicant's drawings show every feature of the invention specified in the claims as required under 35 C.F.R. §1.83(a).

Claim Rejections Under 35 U.S.C. §103:

Claims 1, 4 and 5 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Schneider '826 in view of Bush '514 and further in view of Mark Jr. '533. Applicant respectfully traverses this rejection.

Considering first the primary reference, Schneider '826, Schneider '826 discloses a method of displaying signals obtained from monitoring a phenomenon comprising producing multiple real signals in electronic form, with the multiple real signals each having a standard characteristic and real parameters of different real values. As the Examiner admits in formulating the rejection, Schneider does not disclose assigning separate visual distinctions to at least several of the multiple signals to produce multiple, visually distinct signals. Accordingly, Schneider does not anticipate the subject matter of Applicant's independent claim 1.

It is respectfully submitted that the secondary reference, Bush '514, does not cure the deficiencies of Schneider '826 as a reference against Applicant's claims. Bush '514

discloses the overlay of multiple signals to facilitate a determination of whether or not a signal is in violation of timing requirements. In Bush, it is necessary to isolate each of the overlaid signals one at a time in order to determine which one of many overlaid signals are violating the timing requirement. There is no disclosure in Bush '514 of the following limitations in claim 1:

assigning a separate visual distinction to at least several of the multiple signals to produce multiple visually distinct signals;

displaying a multiple visually distinct signals while superimposed with respect to one another. (emphasis supplied)

Applicant achieves visual distinction in a preferred embodiment of his invention by assigning a separate visual color to each channel. Multiple distinctions can also be achieved by having heavy lines, light lines, thick or thin lines, dotted lines and continuous lines. Of course it is preferable (but not necessary in independent claim 1) to use different colors as is set forth in claim 13 to achieve visual distinction. It is respectfully submitted that Applicant's claimed invention in its broader aspects is not limited to colors, yet still clearly distinguishes over the Schneider '826-Bush '514 combination.

In Mark '533, a multiple strip chart is shown in Fig. 1 and multiple lissajous figures are shown on the same screen in Fig. 2, the figures being displaced from one another rather than being superimposed. Clearly, in Mark '533 the purpose for displaying several signals on a single screen is so that the signals can conveniently be compared to one another. This is evidenced by Mark's requirement that points associated with the same

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detector position be aligned perpendicular to the reference access of the strip charts (see column 2, lines 45-48).

As is seen in Fig. 2 of Mark '533, the four lissajous patterns appear to be about a half an inch long and canted at an angle of 45°. Applicant submits herewith as Exhibit A, a photocopy of Fig. 2 and transparency with the drawing figures illustrated in red. When the transparent photocopy is positioned over the original document, placing lissajous figure 40 over lissajous figure 36, it becomes immediately obvious that lissajous figure 40 is smaller and rotated clockwise with respect to lissajous figure 36. With respect to lissajous figure 38 when superimposed upon lissajous figure 34, it seen that the lower right hand portion of each figure is almost identical, but the upper left hand portion of figure 38 is slightly larger in amplitude than that of figure 40. This is a subtle difference, but it readily apparent by using superimposed signals that are visually distinct. While Mark '533 suggests at column 4, lines 51-53 that each wave form have a respectively different color for ease of identification Mark did not superimpose these signals, thus Mark '533 does not teach the superimposition required by the last paragraph of claim 1, i.e.:

displaying a multiple visually distinct signals while superimposed with respect to one another.

It is respectfully submitted that Mark '533 does not cure the deficiencies of the combination of Schneider '826 and Bush '514 because the step of superimposing signals is not taught or suggested by Mark '533.

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Claims 4 and 5 depend from claim 1 and therefore further limit claim 1. Accordingly, claims 4 and 5 distinguish over the combination of Schneider '826 in view of Bush '514 and Mark '533 for the same reasons as claim 1. Consequently, claims 4 and 5 are allowable for the same reasons as claim 1.

In that this is a full and complete response to the Office Action of March 26, 2003, this application is now in condition for allowance. Such allowance is hereby respectfully requested. If the Examiner for any reason feels a personal conference with Applicant's attorneys might expedite prosecution of this application, the Examiner is respectfully requested to telephone the undersigned locally.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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